



MISCELLANEOUS DRAINAGE MATERIAL FIELD SECTION 1013

1013.1 SCOPE. To establish procedures for the inspection, acceptance, and reporting of miscellaneous items required to provide underdrainage and culvert lining.

1013.2 APPARATUS.

- (a) Rule with suitable graduations to accurately measure the material to be inspected.
- (b) Micrometer or vernier caliper capable of measuring to 0.0001 in. [0.00254 mm] and accurate to within at least 0.001 in [0.0254 mm].

1013.3 PROCEDURE.

1013.3.1 Plastic Pipe for Underdrainage. Plastic pipe for underdrainage is to be accepted for use on the basis of lot certification and field inspection.

1013.3.1.1 Manufacturer's Certification. Prior to acceptance of plastic pipe for underdrainage the manufacturer shall submit a manufacturer's certification for each lot offered for inspection stating the manufacturer's name, and certifying that the material supplied conforms to all requirements specified.

1013.3.1.2 Field Inspection. Field inspection shall consist of reviewing the certification, and randomly checking the length and other pertinent dimensions.

1013.3.2 Pipe for Type IV Pipe Liner. Type IV pipe liner is to be accepted for use on the basis of certification, identification marking, and field inspection.

1013.3.2.1 The minimum size of Type IV pipe liner is a 15" diameter due to clearance limitations. The maximum size of Type IV pipe liner is a 36" diameter due to current ASTM standards.

1013.3.2.2 Manufacturer's Certification. Prior to acceptance of Type IV pipe liner, the manufacturer shall submit a manufacturer's certification which states that the material supplied conforms to all of the requirements for Type IV pipe liner.

1013.3.2.3 Identification Marking. Each pipe is to be clearly marked by the manufacturer and the marking is to contain the manufacturer's name and the applicable ASTM designation. The marking shall be such that it will not be obliterated during handling, shipment, or placement.

1013.3.2.4 Field Inspection. Field inspection shall consist of reviewing the certification, checking the identification marking, checking dimensional requirements, and randomly checking the length and workmanship.

1013.3.3 Rodent Screens. Rodent screens shall be accepted on the basis of visual examination and any tests deemed necessary by the engineer. They should be reported in the remarks when reporting the corresponding pipe on which they will be used. In the remarks, indicate both the total number of screens provided and the type of material from which they are constructed.

1013.4 SAMPLE RECORD. Field inspection shall be recorded in SiteManager, as described in Automation Sec 3510. The sample record shall include the brand name (pipe liner only), manufacturer's name, size, and lengths. The sample record shall indicate acceptance or rejection. If the sample record indicates rejection, the reason for



FS-1013

(Page 2 of 2)

(New 8-18-00)

rejection shall be stated in the remarks. If the sample record indicates acceptance, the basis of acceptance of the pipe shall be that the manufacturer's certification and examination of the material indicates that the material conforms to the requirements of the specifications.

Completion of sample records for materials purchased under a Department purchase order is to be as described in Field Sec 2001 of this Manual.